

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C09K11/02 C09K11/81

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C09K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, COMPENDEX, INSPEC, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 101 31 173 A (ITN NANOVAION GMBH) 16 January 2003 (2003-01-16) paragraph '0013! - paragraph '0017!; claims 1,6	1,3-5, 19-22
X	US 2003/032192 A1 (MEYSAMY HEIKE ET AL) 13 February 2003 (2003-02-13) paragraph '0086! paragraph '0181! - paragraph '0189!; claim 22  ----- -/-	1-4, 19-22



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

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\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

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\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

6 September 2004

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16/09/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Lehnert, A

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HAASE M ET AL: "Synthesis and properties of colloidal lanthanide-doped nanocrystals" JOURNAL OF ALLOYS AND COMPOUNDS, ELSEVIER SEQUOIA, LAUSANNE, CH, vol. 303-304, May 2000 (2000-05), pages 191-197, XP004204357 ISSN: 0925-8388 the whole document	1-4, 19-22
X	US 2001/024088 A1 (BECHTEL HANS-HELMUT ET AL) 27 September 2001 (2001-09-27) claim 11	1,2,4, 19,21,22
A	FARMER S C ET AL: "PHOTOLUMINESCENT POLYMER/QUANTUM DOT COMPOSITE NANOPARTICLES" CHEMISTRY OF MATERIALS, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 13, no. 11, November 2001 (2001-11), pages 3920-3926, XP001108765 ISSN: 0897-4756 the whole document	1-22
A	US 2003/017264 A1 (TREADWAY JOSEPH A ET AL) 23 January 2003 (2003-01-23) claims; example 4	1-22
A	US 6 207 229 B1 (RODRIGUEZ-VIEJO JAVIER ET AL) 27 March 2001 (2001-03-27) example 3	1-22
A	WO 00/38282 A (UNIV MICHIGAN ; HINKLIN THOMAS (US); LAINE RICHARD M (US); RAND STE) 29 June 2000 (2000-06-29) the whole document	1-22
A	EP 1 076 084 A (PATRA PATENT TREUHAND) 14 February 2001 (2001-02-14) claims 1-4	1-22

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/004573

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 10131173	A	16-01-2003	DE 10131173 A1	16-01-2003
US 2003032192	A1	13-02-2003	WO 0220695 A1	14-03-2002
			AU 1003602 A	22-03-2002
			CA 2388094 A1	14-03-2002
			CN 1388827 T	01-01-2003
			WO 0220696 A1	14-03-2002
			DE 10111321 A1	23-05-2002
			EP 1232226 A1	21-08-2002
			JP 2004508215 T	18-03-2004
US 2001024088	A1	27-09-2001	DE 10009915 A1	27-09-2001
			EP 1132938 A2	12-09-2001
			JP 2001283740 A	12-10-2001
US 2003017264	A1	23-01-2003	CA 2453450 A1	06-11-2003
			EP 1409240 A2	21-04-2004
			WO 03092043 A2	06-11-2003
US 6207229	B1	27-03-2001	US 6322901 B1	27-11-2001
			CA 2309967 A1	27-05-1999
			EP 1034571 A1	13-09-2000
			JP 2001523758 T	27-11-2001
			WO 9926299 A1	27-05-1999
			US 6607829 B1	19-08-2003
			US 2004033359 A1	19-02-2004
WO 0038282	A	29-06-2000	AU 3995700 A	12-07-2000
			EP 1135838 A2	26-09-2001
			JP 2002533291 T	08-10-2002
			WO 0038282 A2	29-06-2000
			US 6656588 B1	02-12-2003
EP 1076084	A	14-02-2001	DE 4311197 A1	06-10-1994
			CA 2155340 A1	13-10-1994
			CA 2159906 A1	13-10-1994
			CN 1120873 A ,B	17-04-1996
			CZ 9502421 A3	17-07-1996
			WO 9423442 A1	13-10-1994
			WO 9422975 A1	13-10-1994
			DE 59405921 D1	10-06-1998
			DE 59410172 D1	26-09-2002
			DE 59410196 D1	14-11-2002
			EP 1078972 A2	28-02-2001
			EP 1076084 A2	14-02-2001
			EP 0733266 A1	25-09-1996
			EP 0738311 A1	23-10-1996
			HK 1008759 A1	14-05-1999
			HU 71766 A2	29-01-1996
			JP 3298886 B2	08-07-2002
			JP 8508363 T	03-09-1996
			JP 8508307 T	03-09-1996
			JP 2002216985 A	02-08-2002
			US 5604410 A	18-02-1997
			US 5714835 A	03-02-1998